

Business Indicators ♦ July 2012

Trading Up: From Apprenticeship to Employment

The BC Apprenticeship Student Outcomes (APPSO) Survey is an annual province-wide survey of former apprenticeship students who completed the final year of their apprenticeship training in a B.C. post-secondary institution.

This article is based on findings from the 2011 APPSO Survey Report of Findings. The full report is available online at

<http://outcomes.bcstats.gov.bc.ca/APPSO/APPSOPublications.aspx>

Trades and industry occupations are vital to B.C.'s economy. Currently, there are more than 100 trades for which apprenticeship training is available in the province, offering career opportunities in a diverse range of occupations. Apprenticeship training is delivered through a system that includes the Industry Training Authority, public post-secondary institutions, private training institutions, and employers. Approximately 80 percent of an apprentice's training is provided on-the-job; the remaining technical training is provided in a classroom or shop setting.

The Ministry of Advanced Education, the Industry Training Authority, and the institutions that provide technical training share the commitment to building a skilled work-

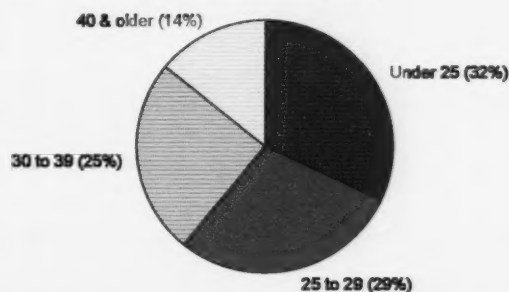
force for the future and work continuously to expand and improve delivery of apprenticeship training in B.C. Results of the annual Apprenticeship Student Outcomes Survey are a critical part of that process.

Who were former apprenticeship students?

The typical former apprenticeship student¹ surveyed in 2011 was male, about 27 years old and had trained in one of the construction trades. The percentage of female respondents in 2011 was 9 percent. Consistent with previous years' findings, the program area with the highest rate of female participation (46 percent) was Culinary Arts.

At the time of the survey, the median age of respondents was 27. The age of respondents ranged from 17 to 69, although very few were over 50 and only 14 percent were 40 or older.

Six of ten former apprenticeship students were under 30 years of age



Most respondents were born in Canada, and of the 10 percent whose country of origin was not Canada, 68 percent were citizens and 27 percent were permanent residents when they took their training.

What apprenticeship programs did survey respondents take?

The former students had apprenticed in a variety of trades.² The programs with the largest number of respondents were Welder and Electrician; one-third of respondents were in one of these two program areas. Carpentry was not far behind, followed by Culinary Arts and Plumbing.

Apprenticeship program areas

| Apprenticeship Program Area | % of Total Respondents |
|--|------------------------|
| Welder | 18% |
| Electrician | 15% |
| Carpentry | 12% |
| Culinary Arts | 11% |
| Plumbing | 10% |
| Exterior & Interior Finishing Trades | 5% |
| Automotive Mechanics | 5% |
| Medium/Heavy Duty Mechanics | 4% |
| Industrial Mechanics & Maintenance | 4% |
| Pipefitter & Sprinkler Fitter | 3% |
| Sheet Metal Worker | 2% |
| Autobody/Collision & Repair | 2% |
| Metal Fabricator (Fitter) | 2% |
| Heating, Air Conditioning, Refrigeration | 2% |
| Other | 5% |
| Total | 100% |

How many received qualification or certification?

Three-quarters (75 percent) of the former apprentices surveyed said they received their British Columbia Certificate of Qualification (C of Q)—many with Inter-provincial

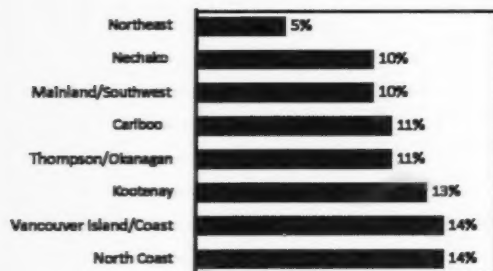
(IP) or Red Seal endorsement. To receive certification, apprentices must successfully complete a number of work-based training hours, complete or successfully challenge all required levels of technical training, pass examinations and be recommended for certification by their sponsor (also referred to as employer sign-off).

What was the labour force participation of former students?

The labour force participation rate—the percentage of those employed or looking for work—of former apprenticeship students has remained consistently high: 95 to 99 percent over the past five years. In 2011, 95 percent of the former students surveyed were in the labour force. In comparison, the labour force participation rate (seasonally unadjusted) for the B.C. population aged 20 to 54 was 83 percent in March of 2011, according to the Statistics Canada Labour Force Survey.

While respondents to the annual surveys have had very high rates of labour force participation, employment has been on the downswing for the last two years. For several years, respondents had unemployment rates under 3 percent, so a jump to 8 percent in 2009 and a further increase to 11 percent in 2010 was startling. However, the unemployment rate has remained at 11 percent for 2011. Those recent rates were a reflection of the declining employment in apprenticeship occupations that occurred across Canada and that was particularly pronounced in B.C. Some regions were harder hit than others, and as a result, the unemployment rates by regional area varied considerably.

The unemployment rate of respondents varied by region



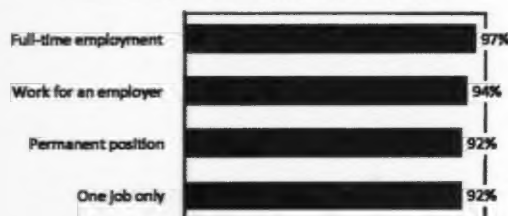
Note: The unemployment rate is the number of unemployed as a percentage of respondents in the labour force.

What were former students' employment outcomes?

At the time of the survey, 85 percent of survey respondents were employed at a job or business. In approximately the same time period, March 2011, the employment rate (seasonally unadjusted) for the B.C. population aged 20 to 54 was 77 percent, according to the Statistics Canada Labour Force Survey.

Most employed respondents had only one job and it was most likely a permanent, full-time position rather than a part-time or temporary one. Likewise, most respondents were employed by someone else rather than being self-employed (6 percent were self-employed).

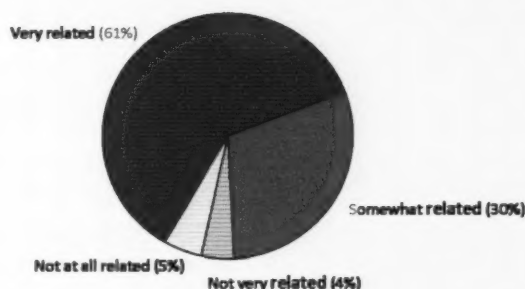
Most employed respondents had full-time, permanent positions with an employer



Note: Percentages above are based on employed respondents.

The respondents who had employment found it relatively quickly—the majority were employed in less than one month. Almost all working respondents had jobs related to their training. Most said the knowledge and skills they gained in their training were useful to them in the performance of their jobs.

Most employed respondents said their current job was related to their apprenticeship training



Respondents' consistently high ratings of their training and high employment rates demonstrate that current apprenticeship training is relevant and aligned with labour market needs.

What occupations did former apprenticeship students have?

A substantial majority—82 percent—of the employed respondents were working in Trades, Transport, and Equipment Operators and Related Occupations.³ The remainder of the respondents were spread thinly across all the other occupational categories, although 12 percent were in Sales and Service Occupations.

There is a very good correlation between former students' apprenticeship programs and their subsequent occupations. For example, 95 percent of those who apprenticed as electricians were employed in electrical

trades or as supervisors, 94 percent of those from the program area of Plumbing were employed as plumbers, pipefitters, and gas fitters, or supervisors, and 91 percent of respondents who apprenticed in the program area of Autobody/Collision & Repair, were employed as motor vehicle mechanics.

What was the wage of respondents employed at the time of the survey?

At the time of the survey, the median hourly wage of employed respondents was \$27. Until 2010, the median hourly wage among former apprenticeship students had been increasing steadily since the 2005 survey—wage figures in previous years were: \$24 (2005), \$25 (2006), \$27 (2007), \$28 (2008), and \$29 (2009 and 2010).⁴

The hourly wage varies quite a bit across occupations. Among the 10 most common occupations for 2011 respondents, the median hourly wage ranges from a low of \$13 (Chefs & Cooks), to a high of \$33 (Machinery & Transportation Equipment Mechanics).

Hourly wage varies significantly by occupation

| Occupation | Hourly wage |
|--|-------------|
| Machinery & Transportation Equipment Mechanics | \$33 |
| Contractors & Supervisors, Trades & Related | \$30 |
| Electrical Trades & Telecommunications | \$30 |
| Plumbers, Pipefitters & Gas Fitters | \$28 |
| Metal Forming, Shaping & Erecting | \$27 |
| Masonry & Plastering Trades | \$26 |
| Carpenters & Cabinetmakers | \$25 |
| Motor Vehicle Mechanics | \$25 |
| Chefs & Cooks | \$13 |
| Other Construction Trades | \$28 |

Note: The wages above are medians; the occupation groups are at the NOC 3-digit level.

¹ When the term *former students* is used, it is meant to represent the former apprenticeship students who responded to one of the Apprenticeship Student Outcomes surveys.

² The trades programs named in this article have been organized according to the Classification of Instructional Programs (CIP) coding and then grouped to simplify reporting.

³ The National Occupational Classification (NOC) system, which is a taxonomy of occupations in the Canadian labour market, was used to assign 4-digit codes to the occupations former students had at the time of the survey. The codes are used to describe occupations and to aggregate them into occupational categories. The grouping of occupations called "Trades, Transport, and Equipment Operators and Related Occupations" is at the 1-digit level.

⁴ These median wage amounts have not been adjusted for inflation.

For more information visit the BC Student Outcomes website

<http://outcomes.bcstats.gov.bc.ca/Default/Home.aspx>